

What is claimed is:

1. A method of performing an impregnating treatment on a resin-containing wood substrate using a fluid comprising the steps of:

(i) providing the wood substrate;

5 (ii) contacting the wood substrate with said fluid; and

(iii) maintaining contact between the wood substrate and the fluid for a time period sufficient to obtain the desired penetration wherein the fluid is a wood protectant with carbon dioxide added thereto.

2. A method according to claim 1, characterized in that wood from a coniferous tree is impregnated using a wood preserving agent comprising at least one species selected from fungicides and insecticides.

3. A method according to claim 2, characterized in that the wood from a coniferous tree is selected from the group consisting of spruce (pica), fir (abies, pseudotsuga), hemlock (tsuga), pine (pinus) and larch (larix).

15 4. A method according to claim 1, characterized in that the wood protectant is a copper amine.

5. A method according to claim 1, characterized in that resinous wood from a coniferous tree is impregnated with at least one organic biocide having carbon dioxide added thereto as delivering medium, that the contact is maintained for at least about ten (10) minutes at a pressure of at least about five (5) bar.

6. A method according to claim 5, characterized in that the at least one biocide is propiconazole or tebuconazole or both.

7. A method according to claim 5, characterized in that the biocide is dissolved in an organic solvent before being combined with the carbon dioxide.

8. A method according to claim 1, characterized in that the wood substrate is additionally impregnated with one or more of the group consisting of colorants, fireproofing agents, and strength-improving agents.

9. In the method for forming lignocellulosic-based composite products which are  
5 resistant to insect and fungal attack, the improvement which comprises incorporating a pesticide or fungicide with the addition of carbon dioxide thereto prior to forming said composite product.

10. The method according to claim 1 in which said carbon dioxide amount is in the range of from about 0.10 to about 1.0 percent by weight of protectant.

10 11. The method according to claim 14 in which said carbon dioxide amount is in the range of from about 0.20 to about 0.80 percent by weight of protectant.

12. The method according to claim 1 in which the ratio of wood protectant to carbon dioxide is from about 1:0.05 to about 1:0.5.

13. The method according to claim 1 in which the ratio of wood protectant to  
15 carbon dioxide is from about 1:0.1 to about 1:1.

14. Composite product according to claim 1 in which said lignocellulosic material is wood.

15. A composite lignocellulosic-based product having resistance to insect and fungal attack, produced by the method according to claim 1.

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